Before the

FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

In the Matter of

The Development of Operational, Technical and Spectrum Requirements For Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010	)))))	WT Docket No. 96-86

Comments of M/A-COM Private Radio Systems, Inc. to the Sixth Further Notice of Proposed Rulemaking.

December 9, 2002

M/A-COM Private Radio Systems, Inc.
P.O. Box 2000
3315 Old Forest Road
Lynchburg, VA
(434) 385-2465

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To the Commission:

INTRODUCTION

M/A-COM Private Radio Systems, Inc. (M/A-COM) applauds the Commission for its efforts to assure the Commission rules keep pace with and recognize the diversity of equipment that is becoming available and will become available in the future as public safety agencies enter full-scale into 700 MHz digital communications. Adopting Adjacent Channel Coupled Power (ACCP) or Adjacent Channel Power (ACP) emission limits for public safety transmitters operating in the 764-776 and 794-806 MHz frequency bands is far preferable to establishing emission "masks" for the various types of communications that public safety will utilize in the 700 MHz frequency bands.

M/A-COM is pleased to say that it generally supports all of the proposals made by the Commission in the Sixth Notice of Proposed Rulemaking concerning establishment of ACCP (or

ACP) values and concerning the Terminology Update from ACCP to ACP[1]. However, as will be explained fully later, M/A-COM wonders whether consensus was ever reached within the Telecommunications Industry Association (TIA) Private Radio Section, on the measurement bandwidth to be utilized to evaluate ACCP or ACP in the immediately adjacent 6.25 kHz channels. M/A-COM is concerned the measurement bandwidth for these the channels does not properly recognize the receiver characteristics of the 6.25 kHz equipment that will be used in the immediately adjacent channels. Our concern increases with the realization that the failure of the measurement bandwidth to adequately reflect receiver characteristics could result in transmitter modulation changes, which will unnecessarily reduce transmitter range thereby increasing system complexity and cost. Furthermore, M/A-COM is concerned that use of an inappropriate measurement bandwidth for the immediately adjacent 6.25 kHz channel could unnecessarily impede the utilization of future spectrum efficient technologies. M/A-COM believes that changes to the measurement bandwidth in very limited cases will facilitate optimal system designs without raising interference potential or banning future spectrally efficient technologies.

BACKGROUND

Tyco Electronics, acquired Com-Net Ericsson Critical Communications, Inc. (Com-Net) in May of 2001, and established M/A-COM Private Radio Systems Inc. as an operating component of its M/A-COM Wireless Systems Business unit. Com-Net and its predecessors Ericsson Private Radio Systems and Ericsson GE Mobile Communications had long been

[1] *See* Sixth Notice of Proposed Rulemaking, WT Docket No. 96-86, FCC 02-272, Section III.A. – Section 90.543(a) – ACCP Values for the 37.5 kHz Frequency Offset; Section III.B. – Section 90.543(a) – ACCP Values for the 350 kHz Frequency Offset; Section III.C. – Section 90.543(a) – ACCP Values for Base Station Frequency Offsets Greater than 400 kHz; Section III.D. – Section 90.543(a) – Clarification that Values for Offsets Greater than 400 kHz Apply Above and Below Authorized Center Frequency; Section III.E. – Section 90.543(a) – Deletion of ACCP Absolute (dBm) Values for Mobiles; Section III.F. – Terminology Update; and, Section III.G. – Section 27.53(d) – Corresponding Changes to ACCP Values for Transmitters Operating in the 700 MHz Guard Bands.

actively involved in the private radio business, particularly the public safety segment of this market. The Tyco Electronics acquisition merged the expertise developed by Com-Net and its predecessors through its Enhanced Digital Access Communications Systems (EDACS®) with the expertise developed within M/A-COM through its advanced digital OpenSky® communications system.

M/A-COM and its predecessors have been active participants in this public safety proceeding[2] from the very beginning. In 1995, Ericsson personnel were very active members of the Public Safety Wireless Advisory Committee (PSWAC) with one Ericsson employee serving as a member of the PSWAC Steering Committee. More recently, M/A-COM and its predecessors have been active members of the Public Safety National Coordination Committee (NCC) again with a current M/A-COM employee serving on the Steering Committee from the very beginning of the NCC in 1999.

M/A-COM and its predecessors have also been very active participants in the formal rulemaking activities of this public safety proceeding since the initiation of the rulemaking in the fall of 1996. We have supplied numerous comments, replies and petitions throughout the various steps in this proceeding and we have participated in numerous presentations and briefings to Commission Staff on relevant issues and topics.

Additionally, M/A-COM and its predecessors have participated in the TIA discussions within the Private Radio Section and the various TR8 Engineering Subcommittees that developed the TIA recommendations[3] which form the basis for this part of the public safety proceeding. We have accompanied TIA members and staff to the Commission for various presentations and discussions on the topics raised in the instant Notice of Proposed Rulemaking.

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[2] In the Matter of The Development of Operational, Technical and Spectrum Requirements For Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010, WT Docket No. 96-86

[3] Comments of the Private Radio Section of the Wireless Communications Division of the Telecommunications Industry Association, WT Docket No. 96-86, filed August 23, 2001. NB: The 6th Notice of Proposed Rulemaking, fn. 8, indicates these PRS comments were filed August 30, 2001, but the Commission's Comment Search Tool shows the PRS comments were dated and filed August 23, 2001.

In light of this background, M/A-COM is pleased to offer the Commission these comments.

DISCUSSION

A. ADJACENT CHANNEL COUPLED POWER VALUES - Sec. 90.543

1. ACCP Values for the 37.5 kHz Frequency Offset.

M/A-COM agrees that the emission limitation requirements for base stations should be more stringent than the emission limitation requirements for mobile transmitters. In 1998, as noted in the Petition for Reconsideration filed by our predecessor company, Ericsson Inc., we have always believed that the –65 dBc value for the 37.5 kHz frequency offset with 12.5 kHz and 25 kHz transmitters was in error.[4]

We, therefore strongly support the FCC proposal to change the ACCP value for the 37.5 kHz frequency offset with 12.5 kHz and 25 kHz transmitters to –60 dBc.

2. ACCP Values for the 350 kHz Frequency Offset.

While our predecessor company's 1998 Petition for Reconsideration[5] did not specifically recommend the addition of ACCP values for the 350 kHz frequency offset, we believe that the addition of an ACCP value for the 350 kHz frequency offset will provide additional clarity to the rules. Furthermore, M/A-COM agrees that the proposed ACCP value for this new offset of –65 dBc with a 100 kHz measurement bandwidth is the appropriate requirement.

[4] *See* the Tables for 12.5 kHz Mobile Transmitter ACCP Requirements and 25 kHz Mobile Transmitter ACCP Requirements, at page 11 of The Petition for Reconsideration of Ericsson Inc. to the First Report and Order, dated December 2, 1998, and filed in WT Docket No. 96-86 on December 2, 1998.
[5] fn. 3, *supra*.

3. ACCP Values for Base Station Frequency Offsets Greater than 400 kHz.

While our predecessor company, in its previous filings, did not highlight the confusion factor introduced by the formulaic ACCP approach for offsets greater than 400 kHz up to the receive band, M/A-COM recognizes the confusion and potentially contradictory requirements caused by the current formula in the Commissions rules. We believe that a single set ACCP value rather than a formula is the best way to implement a clear and enforceable emission limitation requirement for frequency offsets greater than 400 kHz up to the receive band. We agree that the Commission's proposed value of –80 dBc for offsets greater than 400 kHz up to the receive band is reasonable. M/A-COM, however, also wishes to point out that in later filed comments, which principally address wideband ACCP recommendations,[6] TIA recommended that the ACP requirement for base station transmissions in the "paired receiver band" should be relaxed from –100 dBc to –85 dBc for both wideband and narrowband transmitters. TIA justified relaxing the ACCP value on the basis that greater protection than this is routinely provided by additional filtering external to the transmitter. M/A-COM agrees wih this TIA recommendation and thus recommends this change be included in the tables for 6.25 kHz, 12.5 kHz and 25 kHz base station transmitters now found in Sections 90.543 and 27.53. These revised numbers are shown in the Tables recommended by M/A-COM in subsection B of this Discussion section hereinafter.

4. General

Our predecessor company did not address a number of the proposals made by the Commission in the Sixth Notice of Proposed Rulemaking, but M/A-COM agrees with these additional Commission proposals. Specifically, M/A-COM agrees with the method

[6] *See* comments of the Private Radio Section of the Wireless Communications Division of the Telecommunications Industry Association, WT Docket No. 96-86, filed July 16, 2002

recommended by TIA and proposed by the Commission to clarify "…that Values for Offsets Greater than 400 kHz Apply Above and Below Authorized Center Frequency;"[7] and with the "…Deletion of ACCP Absolute (dBm) Values for Mobiles,"[8] as recommended by TIA and proposed by the Commission; and with the "…Terminology Update"[9] recommended by TIA and proposed by the Commission.

M/A-COM also believes that compatible changes should be implemented for transmitters operating in the 700 MHz Guard bands, if the purpose of the guards bands as protectors of public safety spectrum is to be fully realized. Thus we agree with the Commission proposal to adopt corresponding revisions to Section 27.53(d) of the Commission's rules.[10]

4. Wideband ACCP requirements.

M/A-COM understands that the TIA comments referenced in the Sixth Notice of Proposed Rulemaking solely addressed the ACCP requirements associated with narrowband transmitters, i.e. transmitters with bandwidths less than or equal to 25 kHz. The TIA comments referenced in the Sixth Notice of Proposed Rulemaking specifically stated TIA was in the process of developing ACCP recommendations for 700 MHz wideband transmitters, and that such recommendations would be submitted to the Commission for action in 2002.

M/A-COM would like to direct the Commission's attention to comments[11] that have been filed with the Commission wherein, TIA provided recommendations for ACCP requirements applicable to wideband transmitters. Current Commission rules are nonexistent as regards 50 kHz and 100 kHz transmitters, and the rules for 150 kHz transmitters are substantially

[7] *See* paragraphs 10 through 14, inclusive, of the Sixth Notice of Proposed Rulemaking, WT Docket No. 96-86, FCC 02-272.
[8] *See* paragraphs 15 & 16, of the Sixth Notice of Proposed Rulemaking, WT Docket No. 96-86, FCC 02-272.
[9] *See* paragraph 17, of the Sixth Notice of Proposed Rulemaking, WT Docket No. 96-86, FCC 02-272.
[10] *See* paragraph 18, of the Sixth Notice of Proposed Rulemaking, WT Docket No. 96-86, FCC 02-272.
[11] *See* comments of the Private Radio Section of the Wireless Communications Division of the Telecommunications Industry Association, WT Docket No. 96-86, filed July 16, 2002.

inconsistent with many of the changes in methodology and policy embodied in the changes proposed in the Sixth Notice of Proposed Rulemaking for narrowband transmitters.

M/A-COM, therefore, strongly encourages the Commission to expeditiously commence additional rulemaking proceedings within the WT Docket No. 96-86 in order to implement the necessary improvements and/or modifications to the wideband ACCP requirements in the Commission's rules.

B. MEASUREMENT BANDWIDTH

In the First Report and Order[12] in this proceeding the Commission adopted Section 90.543 of the Commission's rules, which established emission limits for the 700 MHz band based on ACCP. The limits that the Commission adopted in Section 90.543, also included adoption of measurement bandwidths for calculation/measurement of the applicable ACCP limits. Specifically, the rules as adopted indicated that a 6.25 kHz measurement bandwidth offset 6.25 kHz from center frequency for 6.25 kHz transmitters, and offset 9.375 kHz from center frequency for 12.5 kHz transmitters, and offset 15.625 kHz from center frequency for 25 kHz transmitters was to be utilized for ACCP determinations in the 6.25 kHz channel immediately adjacent to the transmitter channel.

M/A-COM's predecessor, Ericsson Inc., filed a Petition for Reconsideration,[13] which noted, among other things, that even though Ericsson Inc. generally agreed with the ACCP concept, the measurement bandwidth for ACCP determinations in the 6.25 kHz channel immediately adjacent to the transmitter channel should be changed. Ericsson Inc. recommended that the measurement bandwidth for ACCP determinations in the 6.25 kHz channel immediately

[12] *See* Development of Operational, Technical and Spectrum Requirements For Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010, WT Docket 96-86, *First Report and Order and Third Notice of Proposed Rule Making*, 14 FCC Rcd 152, 214 ¶ 138 (1998)

[13] *See* The Petition for Reconsideration of Ericsson Inc. to the First Report and Order, dated December 2, 1998, and filed in WT Docket No. 96-86 on December 2, 1998

adjacent to the transmitter channel should be 5.0 kHz, offset 6.25 kHz from center frequency for 6.25 kHz transmitters, and offset 9.375 kHz from center frequency for 12.5 kHz transmitters, and offset 15.625 kHz from center frequency for 25 kHz transmitters.

The Commission did not specifically address the Ericsson Inc. measurement bandwidth recommendations in the Second Memorandum Opinion and Order.[14] Instead, the Commission noted that there was general industry agreement on the ACCP concept, and the Commission invited the industry to develop recommendations for ACCP values. This culminated in the comments that were filed by TIA in August of 2001.[15] M/A-COM agrees consensus was reached on the ACCP values that were included in the TIA filing. However, M/A-COM questions whether or not consensus was reached on the specific issue of the measurement bandwidth that should be used for ACCP determinations in the 6.25 kHz channel immediately adjacent to the transmitter channel.

Prior to the August, 2001 meeting of the TIA Private Radio Section and the relevant TR8 Engineering Subcommittees, there was no discussion on the appropriate measurement bandwidth for ACCP determinations in the 6.25 kHz channel immediately adjacent to the transmitter channel. In the initial draft of the recommendations that would become the TIA August, 2001 submission, the measurement bandwidth numbers were simply the numbers that had been included in Section 90.543. In essence, TIA Private Radio Section and the relevant TR8 Engineering Subcommittees had not appropriately addressed the issues raised by Ericsson Inc, and others, regarding the correct measurement bandwidth to be used for ACCP determinations in the 6.25 kHz channel immediately adjacent to the transmitter channel.

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[14] *See* Development of Operational, Technical and Spectrum Requirements For Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010, WT Docket 96-86, *Second Memorandum Opinion and Order* 15 FCC Rcd 16844, 16853 ¶ 17 (2000)

[15] fn3, *supra*.

At the August 2001 meeting of TR8.6, the Transceiver Performance Recommendations Engineering Subcommittee, a motion was made and seconded that the ACCP measurement range for the 6.25 kHz channel immediately adjacent to a 12.5 kHz transmitter be from 6.625 kHz to 12.5 kHz to more closely resemble the band occupied by a receiver centered at 9.375 offset. In effect this motion was saying that the measurement bandwidth should be 5.875 kHz offset 0.1875 kHz from the center of the receiver channel away from the transmitter. The motion properly recognized that the effective receiver bandwidth of the receiver occupying the 6.25 kHz channel immediately adjacent to the transmitter channel is only 5.5 kHz.

When the vote was taken on the motion at the TR8.6 meeting in August of 2001, the total was 7 in favor of the motion, and 4 against the motion, with two abstentions. In essence, a significant majority of those decisively voting believed that the measurement bandwidth should be changed from 6.25 kHz to 5.875 kHz for the 6.25 kHz channel immediately adjacent to the transmitter.[16] However, the subcommittee chair, declared that due to the large number of "no" votes there was no consensus for the change and thus the measurement bandwidth for the 6.25 kHz channel immediately adjacent to the transmitter would remain at 6.25 kHz. What is very interesting about this scenario is that fact that consensus was a requirement to change a number on which consensus had likely never been achieved. In fact, M/A-COM believes that the 6.25 kHz measurement bandwidth for the 6.25 kHz channel immediately adjacent to the transmitter would not be supported by even a simple majority of the TIA voting members.

In light of the foregoing, M/A-COM does not believe that either the Commission or the TIA Private Radio Section have adequately addressed the measurement bandwidth issues that were raised by Ericsson Inc., and others, in their timely filed Petitions for Reconsideration.

[16] *See* Chairman's Report for Meeting No. 2001-5, Document No. TR-8.6?01-10-0032, 1 August 2001 meeting of TR8.6at the Sheraton Hotel, Salt lake City, UT.

Specifically, we believe the correct measurement bandwidth for the 6.25 kHz channel immediately adjacent to the transmitter remains a viable issue requiring Commission action.

For the reasons expressed partially in the Ericsson Inc. Petition for Reconsideration and for the reasons expressed herein most notably the need to assure consistency with the motion made at the TR8.6 meeting in August of 2001 and assure consistency with receiver characteristics, M/A-COM believes that the tables in Section 90.543(a) as proposed in the Sixth Notice of Proposed Rulemaking[17] should be changed to read as follows: (Changed measurement bandwidth values are shown in bold. The 6.25 kHz, 12.5 kHz and 25 kHz base transmitter tables shown hereinafter include the recommended change for ACCP in the paired receive band as discussed in subsection A.3, *supra*.)

6.25 kHz Mobile Transmitter ACP Requirements

Offset from Center Frequency (kHz)	Measurement Bandwidth (kHz)	Maximum ACP (dBc)
6.4375	**5.875**	-40
12.5	6.25	-60
18.75	6.25	-60
25.00	6.25	-65
37.50	25.00	-65
62.50	25.00	-65
87.50	25.00	-65
150.00	100.00	-65
250.00	100.00	-65
350.00	100.00	-65
>400 kHz to 12 MHz	30 (s)	-75
12 MHz to paired receive band	30 (s)	-75
In the paired receive band	30 (s)	-100

[17] *See* Sixth Notice of Proposed Rulemaking, pages A-7, A-8, A-9, and A-10

12.5 kHz Mobile Transmitter ACP Requirements

Offset from Center Frequency (kHz)	Measurement Bandwidth (kHz)	Maximum ACP (dBc)
9.5625	**5.875**	-40
15.625	6.25	-60
21.875	6.25	-60
37.50	25.00	-60
62.50	25.00	-65
87.50	25.00	-65
150.00	100	-65
250.00	100	-65
350.00	100	-65
>400 to 12 MHz	30 (s)	-75
12 MHz to paired receive band	30 (s)	-75
In the paired receive band	30 (s)	-100

25 kHz Mobile Transmitter ACP Requirements

Offset from Center Frequency (kHz)	Measurement Bandwidth (kHz)	Maximum ACP (dBc)
15.8125	**5.875**	-40
21.875	6.25	-60
37.50	25	-60
62.50	25	-65
87.50	25	-65
150.00	100	-65
250.00	100	-65
350.00	100	-65
>400kHz to 12 MHz	30 (s)	-75
12 MHz to paired receive band	30 (s)	-75
In the paired receive band	30 (s)	-100

150 kHz Mobile Transmitter ACP Requirements

Offset from Center Frequency (kHz)	Measurement Bandwidth (kHz)	Maximum ACP Relative (dBc)	Maximum ACP Absolute (dBc)
100	50	-40	Not specified
200	50	-50	-35
300	50	-50	-35
400	50	-50	-35
600-1000	30(s)	-60	-45
1000 to receive band	30(s)	-70	-55
In the receive band	30(s)	-100	-75

6.25 kHz Base Transmitter ACP Requirements

Offset from Center Frequency (kHz)	Measurement Bandwidth (kHz)	Maximum ACP (dBc)
6.4375	**5.875**	-40
12.50	6.25	-60
18.75	6.25	-60
25.00	6.25	-65
37.50	25	-65
62.50	25	-65
87.50	25	-65
150.00	100	-65
250.00	100	-65
350.00	100	-65
>400 to 12 MHz	30 (s)	-80
12 MHz to paired receive band	30(s)	-80
In the paired receive band	30 (s)	-85

12.5 kHz Base Transmitter ACP Requirements

Offset from Center Frequency (kHz)	Measurement Bandwidth (kHz)	Maximum ACP (dBc)
9.5625	**5.875**	-40
15.625	6.25	-60
21.875	6.25	-60
37.5	25	-60
62.5	25	-65
87.5	25	-65
150	100	-65
250	100	-65
350.00	100	-65
>400 kHz to 12 MHz	30 (s)	-80
12 MHz to paired receive band	30 (s)	-80
In the paired receive band	30 (s)	-85

25 kHz Base Transmitter ACP Requirements

Offset from Center Frequency (kHz)	Measurement Bandwidth (kHz)	Maximum ACP (dBc)
15.8125	**5.875**	-40
21.875	6.25	-60
37.5	25	-60
62.5	25	-65
87.5	25	-65
150	100	-65
250	100	-65
350	100.00	-65
>400 kHz to12 MHz	30(s)	-80
12 MHz to paired receive band	30 (s)	-80
In the paired receive band	30 (s)	-85

150 kHz Base Transmitter ACP Requirements

Offset from Center Frequency (kHz)	Measurement Bandwidth (kHz)	Maximum ACP (dBc)
100	50	-40
200	50	-50
300	50	-55
400	50	-60
600-1000	30(s)	-65
1000 to receive band	30(s)	-75 (continues at 6dB/oct)
In the receive band	30(s)	-100

Alternatively, the Commission could select a measurement bandwidth of 5.5 kHz with no displacement from the center of the 6.25 kHz channel immediately adjacent to the transmitter channel. M/A-COM does not believe that using this measurement bandwidth would negatively impact the interference environment. Use of a 5.5 kHz measurement bandwidth would change the proposed ACCP tables in Section 90.543(a) as follows. (Changed bandwidth measurement values are again noted in bold. The 6.25 kHz, 12.5 kHz and 25 kHz base transmitter tables shown hereinafter include the recommended change for ACCP in the paired receive band as discussed in subsection A.3, *supra*.)

6.25 kHz Mobile Transmitter ACP Requirements

Offset from Center Frequency (kHz)	Measurement Bandwidth (kHz)	Maximum ACP (dBc)
6.25	**5.500**	-40
12.5	6.25	-60
18.75	6.25	-60
25.00	6.25	-65
37.50	25.00	-65
62.50	25.00	-65
87.50	25.00	-65
150.00	100.00	-65
250.00	100.00	-65
350.00	100.00	-65
>400 kHz to 12 MHz	30 (s)	-75
12 MHz to paired receive band	30 (s)	-75
In the paired receive band	30 (s)	-100

12.5 kHz Mobile Transmitter ACP Requirements

Offset from Center Frequency (kHz)	Measurement Bandwidth (kHz)	Maximum ACP (dBc)
9.375	**5.500**	-40
15.625	6.25	-60
21.875	6.25	-60
37.50	25.00	-60
62.50	25.00	-65
87.50	25.00	-65
150.00	100	-65
250.00	100	-65
350.00	100	-65
>400 to 12 MHz	30 (s)	-75
12 MHz to paired receive band	30 (s)	-75
In the paired receive band	30 (s)	-100

25 kHz Mobile Transmitter ACP Requirements

Offset from Center Frequency (kHz)	Measurement Bandwidth (kHz)	Maximum ACP (dBc)
15.625	**5.500**	-40
21.875	6.25	-60
37.50	25	-60
62.50	25	-65
87.50	25	-65
150.00	100	-65
250.00	100	-65
350.00	100	-65
>400kHz to 12 MHz	30 (s)	-75
12 MHz to paired receive band	30 (s)	-75
In the paired receive band	30 (s)	-100

150 kHz Mobile Transmitter ACP Requirements

Offset from Center Frequency (kHz)	Measurement Bandwidth (kHz)	Maximum ACP Relative (dBc)	Maximum ACP Absolute (dBc)
100	50	-40	Not specified
200	50	-50	-35
300	50	-50	-35
400	50	-50	-35
600-1000	30(s)	-60	-45
1000 to receive band	30(s)	-70	-55
In the receive band	30(s)	-100	-75

6.25 kHz Base Transmitter ACP Requirements

Offset from Center Frequency (kHz)	Measurement Bandwidth (kHz)	Maximum ACP (dBc)
6.25	**5.500**	-40
12.50	6.25	-60
18.75	6.25	-60
25.00	6.25	-65
37.50	25	-65
62.50	25	-65
87.50	25	-65
150.00	100	-65
250.00	100	-65
350.00	100	-65
>400 to 12 MHz	30 (s)	-80
12 MHz to paired receive band	30(s)	-80
In the paired receive band	30 (s)	-85

12.5 kHz Base Transmitter ACP Requirements

Offset from Center Frequency (kHz)	Measurement Bandwidth (kHz)	Maximum ACP (dBc)
9.375	**5.500**	-40
15.625	6.25	-60
21.875	6.25	-60
37.5	25	-60
62.5	25	-65
87.5	25	-65
150	100	-65
250	100	-65
350.00	100	-65
>400 kHz to 12 MHz	30 (s)	-80
12 MHz to paired receive band	30 (s)	-80
In the paired receive band	30 (s)	-85

25 kHz Base Transmitter ACP Requirements

Offset from Center Frequency (kHz)	Measurement Bandwidth (kHz)	Maximum ACP (dBc)
15.625	**5.500**	-40
21.875	6.25	-60
37.5	25	-60
62.5	25	-65
87.5	25	-65
150	100	-65
250	100	-65
350	100.00	-65
>400 kHz to12 MHz	30(s)	-80
12 MHz to paired receive band	30 (s)	-80
In the paired receive band	30 (s)	-85

150 kHz Base Transmitter ACP Requirements

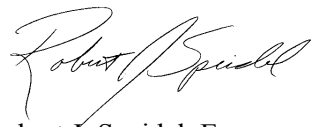
Offset from Center Frequency (kHz)	Measurement Bandwidth (kHz)	Maximum ACP (dBc)
100	50	-40
200	50	-50
300	50	-55
400	50	-60
600-1000	30(s)	-65
1000 to receive band	30(s)	-75 (continues at 6dB/oct)
In the receive band	30(s)	-100

SUMMARY/CONCLUSION

M/A-COM endorses the ACCP or ACP values that have been proposed by the Commission in the 6th Notice of Proposed Rulemaking, WT Docket No. 96-86, as specifically discussed herein.

While M/A-COM generally endorses the proposed ACCP or ACP values, M/A-COM does not agree that a 6.25 kHz measurement bandwidth is appropriate or wise for the first adjacent 6.25 kHz channel. We question if consensus was reached within TIA on this particular value. In fact, we believe that the majority, although maybe not a consensus, of the TIA participants agree that the 6.25 kHz measurement bandwidth for the immediately adjacent 6.25 kHz channel is incorrect. Furthermore we expect that this majority of the TIA participants believe an appropriate measurement bandwidth for this channel would be a value consistent with the values proposed herein.

M/A-COM strongly encourages the Commission to also take whatever steps are necessary to implement ACCP or ACP values for the wideband 700 Hz transmitters in an expeditious manner. These wideband values should be consistent with the methodologies and policies underlying the narrowband values proposed in the Sixth Notice of Proposed Rulemaking, as well as being consistent with the recommendations in the July 16, 2002 TIA comments.



Robert J. Speidel, Esq.
Manager, Regulatory Policy
M/A-COM Private Radio Systems, Inc.
P.O. Box 2000
3315 Old Forest Road
Lynchburg, VA 24501
(434) 385-2465